



# 21555 Non-Transparent PCI-to-PCI Bridge DbFlash

Application Note

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*November 2002*

Order Number: [278654-001](#)



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## Revision History

Date	Revision	Description
November 2002	001	First release of this document



## 1.0 Introduction

*Dbflash.exe* is an MSDOS-based program that allows the flash ROM attached to the 21555 to be erased and updated with new images.

When *dbflash.exe* is run on a system that has a 21555 installed on the PCI bus, the program will scan all the PCI buses looking for the 21555 component.

When found, the program identifies the 21555's PCI location and starts the update process that was selected on the command line.

## 2.0 Board Setup

The target board to receive the new image must have the flash component selected. When the target board is plugged into a PCI slot and the power turned on, the program can be run.

**Note:** Please refer to the specific target board documentation for more information on emulation socket versus flash selection (if applicable).

## 3.0 Running DbFlash.exe

Make sure that both *dbflash.exe* and the 32-bit DOS extender *dos4gw.exe* files are in the same directory or both are in the environment path. The *dbflash.exe* takes parameters to tell it what to do, such as block location and flash image. A typical flash programming update will require the user to specify the flash block to update and the new image to use. The following example will flash image 'NewRomImage.bin' into block 0 of the 21555 expansion ROM.

***Dbflash /b0 NewRomImage.bin***

During the next boot of the PC, the BIOS will find this image in the ROM and if it has a PCI compliant Expansion ROM header, the image will be loaded and executed by the system BIOS during POST.

**Note:** For more information on how this works, please read the *PCI Local Bus Specification, Version 2.3* (or later).

**Table 1. DbFlash Commands**

Command	Description	Comments
Dbflash /e	Erase entire flash ROM contents	Will erase all blocks
Dbflash /bx image.bin	Program block x with <i>image.bin</i>	If image is larger than 1 block, the program will continue into the next block until entire image is loaded.

